

WE CLAIM AS OUR INVENTION:

1. The method for controlling a cooking process comprising the steps of:
controlling the cooking process in response to at least two temperature values
picked up by a cooking process sensor stuck at least partly into food to be cooked; and
determining specific parameters of at least one of the cooking food and a
cooking utensil for the cooking food via thermo-kinetics of the picked-up temperature
values, and
utilizing the determined parameters for controlling the cooking process.

2. The method of claim 1 wherein a plurality of temperature values are
detected by the cooking process sensor within the cooking food at different depths of
penetration, and at least one other temperature value is detected outside of the cooking
food, the values being utilized for control of the cooking process.

3. The method according to claim 2 wherein four of said temperature values
are detected.

4. The method according to claim 2 wherein said at least one other
temperature value is detected at a cooking food surface.

5. The method of claim 1 wherein at least one moisture value is registered by the cooking process sensor in the cooking food and drawn upon for controlling the cooking process.

6. The method according to claim 5 wherein the process sensor also measures at least one moisture value at the cooking food.

7. The method of claim 1 wherein air flow at least at the cooking food is registered by the cooking process sensor and used for controlling the cooking process.

8. The method of claim 1 wherein differential temperature values between sensors arranged spaced apart along a direction of penetration of the cooking process sensor are detected and used for controlling the cooking process.

9. The method according to claim 8 wherein at least two moisture value sensors are provided in the cooking process sensor and differential moisture values are obtained and utilized for controlling the cooking process.

10. The method of claim 1 wherein at least one of core temperature of the cooking food, placement of the cooking process sensor in the cooking food, diameter of the cooking food, density of the cooking food, type of cooking food, degree of

ripeness of the cooking food, pH of the cooking food, consistency of the cooking food, storage condition of the cooking food, smell of the cooking food, taste of the cooking food, quality of the cooking food, browning of the cooking food, crust forming of the cooking food, vitamin decomposition of the cooking food, formation of carcinogenic substances in the cooking food, hygiene of the cooking food, and heat conductivity of the cooking food is determined as a specific cooking food parameter picked-up by the cooking process sensor.

11. The method according to claim 10 wherein the parameter of placement of the cooking process sensor in the cooking food comprises placing the sensor at a core point of the cooking food.

12. The method according to claim 10 wherein the specific cooking food parameter is determined by extrapolation of values registered by the cooking process sensor.

13. The method according to claim 10 wherein the specific cooking food parameter is determined by iteration of values registered by the cooking process sensor.

14. The method of claim 1 wherein at least one of power, amount of air circulated, energy consumption, batch, specific performance, and load:power ratio of the cooking utensil is determined as a cooking utensil parameter picked up by the cooking process sensor.

15. The method according to claim 14 wherein the cooking utensil parameter is determined by extrapolation of values registered by the cooking process sensor.

16. The method according to claim 14 wherein the cooking utensil parameter is determined by iteration of values registered by the cooking process sensor.

17. The method of claim 1 wherein at least one of temperature values, differential temperature values, moisture values, differential moisture values, and air flow values picked up are supplied by the cooking process sensor to a control unit for at least one of the heater element, a cooling element, a ventilator, a unit for introducing moisture into the cooking space, a unit for discharging moisture from the cooking space, a unit for supplying energy, and a unit for dissipating energy.

18. The method according to claim 17 wherein the method controls the path of the cooking process.

19. The method according to claim 17 wherein the method achieves a set cooking result.

20. The method of claim 1 wherein at least one of temperature values, differential temperature values, moisture values, differential moisture values, and air flow values picked up by the cooking process sensor are utilized for controlling at least one of temperature path, moisture content, and air flow of at least one of the cooking food and cooking utensil.

21. The method of claim 1 wherein at least one of water activity, moisture content, and protein content of the cooking food is determined by the cooking process sensor.

22. The method according to claim 21 wherein the parameters determined are supplied to an evaluating unit.

23. A cooking process sensor, comprising:
a tip equipped with at least two sensors and shaped and designed for introduction at least partly into cooking food; and
a handle for insertion of the sensor into the cooking food.

24. The cooking process sensor according to claim 23 wherein at least four temperature sensors are provided at the tip and at least one temperature sensor is provided at the handle of the sensor.

25. The cooking process sensor of claim 23 wherein at least one other sensor unit is provided in fixed fashion in the cooking space.

26. The cooking process sensor according to claim 23 wherein a differential temperature value evaluating unit is provided in the handle of the sensor.

27. The cooking process sensor of claim 23 wherein the sensor is designed to provide sensor signals to an evaluating control unit in the form of a microprocessor.

28. The cooking process sensor according to claim 23 wherein the sensor includes a cable adapted for connecting to a cooking utensil.

29. A method for controlling a cooking process, comprising the steps of:
controlling the cooking process in response to at least two temperature values picked up by a cooking process sensor stuck at least partly into food to be cooked; and
determining specific parameters of the cooking food via thermo-kinetics of the picked-up temperature values, and

utilizing the determined parameters for controlling the cooking process.

~~30.~~ A cooking process sensor, comprising:

an elongated tip equipped with at least two temperature sensors and shaped and designed for introduction at least partly into cooking food; and

a handle for insertion of the sensor into the cooking food.

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